

**REMARKS**

The applicant respectfully requests reconsideration in view of the amendment and following remarks. The applicants have amended the claims in order to overcome the 35 U.S.C. 112 rejections. Claims 11-26 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 11-15, 17, 19-22, 24-26 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of U.S. Patent No. 6,489,388 (“Kurz”). Claims 11-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Kurz. Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horio U.S. Patent No. 6,147,146 (“Horio”) in view of Takayama U.S. Patent No. 6,284,828 (“Takayama”). The applicants respectfully traverse these rejections.

**Rejections under 35 U.S.C. § 112**

Claims 11-26 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The applicants believe that the claims as amended are in compliance with 35 U.S.C. § 112, second paragraph.

The expression “white goods sector” is a technical term art and known to one of ordinary skill in the art. The term “white goods sector” encompasses household appliances, e.g. refrigerators or dishwashers. The encompassed devices are usually but not necessarily white. For the above reasons, this rejection should be withdrawn.

**DOUBLE PATENTING REJECTION**

Claims 11-15, 17, 19-22, 24-26 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-9 of Kurz. The applicants respectfully disagree. Kurz does not recognize the importance of component (D) from 0.01 to 1% by weight of one or more nitrogen-containing costabilizer. Kurz claims

“(D) from 0 to 50% by weight of fillers, reinforcing materials and/or additives wherein the additives are selected from the group consisting of (1) stabilizers, (2) nucleating agents, (3) antistatics, (4) light stabilizers, (5) lubricants, (6) plasticizers, (7) pigments, (8) dyes, (9) optical brighteners, (10) processing auxiliaries, and (11) mixtures thereof.”<sup>1</sup>  
(emphasis added)

Kurz claim 1 does not require component (D), let alone in the amount from 0.01 to 1% as is required by the applicants’ claimed invention. It is acknowledged that claim 6 of Kurz claims from 0.1 to 5% by weight of an additive. In addition, the applicants’ claimed invention requires that component (D) is one or more nitrogen-containing costabilizer. There is no teaching to select one or more nitrogen-containing costabilizer in the specific group of fillers claimed. Dependent claim 6 only limits the additive to a stabilizer, but not to a nitrogen-containing costabilizer. The applicants’ claimed invention is a selection invention over Kurz. For the above reasons, this rejection should be withdrawn.

**35 U.S.C. 102(e) REJECTION**

Claims 11-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Kurz. The applicants again respectfully disagree. For anticipation to apply, every claimed feature must be taught in the prior art. Kurz does not teach component D. Kurz’ component D) is as follows:

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<sup>1</sup> The numbers have been inserted by the applicants and were not in the original claim.  
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“(D) from 0 to 50% by weight of fillers, reinforcing materials and/or additives wherein the additives are selected from the group consisting of (1) stabilizers, (2) nucleating agents, (3) antistatics, (4) light stabilizers, (5) lubricants, (6) plasticizers, (7) pigments, (8) dyes, (9) optical brighteners, (10) processing auxiliaries, and (11) mixtures thereof.”  
(emphasis added)

There are 10 different groups disclosed for this optional component. In the applicants' claimed invention component D) is not optional. In fact, in the applicants' claimed invention, it is a specific group within the 10 different groups. Further component D) must be present in an amount from 0.01 to 1%. This range is included in the range from 0 to 50%, but this range is not taught by Kurz. The applicants' claimed component d) (one or more nitrogen containing costabilizers) in an amount from 0.01 to 1% was not recognized by Kurz. The examples in Kurz did not contain any costabilizers, let alone the one the applicants' claimed and in the amount required by the claimed invention. Therefore, the claimed invention is not rendered anticipated by Kurz.

It is pointed out that both Kurz and this application are owned by Ticona GmbH.

**Rejections under 35 U.S.C. § 103:**

Claims 1-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horio in view of Takayama. The object of the present invention was to provide polyoxymethylene compounds with high resistance in view of acids, in particular to aggressive acid-containing cleaners. Acid resistant polyoxymethylene compounds can be provided if specific additives comprising polyalkylene glycol, nitrogen-containing -costabilizers and zinc oxide are used.

The examples 5 and 8 of the present application, comprising said three additives, show the lowest loss of elongation of the material after treatment with a phosphoric acid solution.

Horio describes resin compositions with excellent extrusion moldability and anti-slip properties. The oxymethylene polymer resin composition encompass essentially sterically hindered phenol compound, a low-density polyethylene, a calcium salt of a fatty acid and a compound of a formaldehyde reactive nitrogen atom (see column 4, lines 21-37). The use of zinc oxide as inorganic pigment and the use of polyakylene glycol as lubricant is only described as possible additives.

Horio states at col. 17, lines 39-53

Examples of pigments include organic pigments and inorganic pigments. As inorganic pigments, there can be mentioned inorganic pigments conventionally used for the coloring of resins. Examples of inorganic pigments include (1) zinc sulfide, (2) **zinc oxide**, (3) titanium oxide, (4) barium sulfate, (5) Titan Yellow, (6) iron oxide, (7) ultramarine, (8) cobalt blue, (9) calcined pigments, (10) carbonate, (11) phosphate, acetate, (12) carbon black, (13) acetylene black, (14) lamp black and the like. Examples of organic pigments include a condensed (15) azo type, (16) an isoindoline type, (17) a disazo type, (18) a monoazo type, (19) an anthraquinone type, (20) a heterocyclic type, (21) a quinacridone type, (22) a thioindigo type, (23) a perylene type, (24) a dioxazine type, (25) a phthalocyanine type and the like. These pigments can be used in an amount usually employed in the art. (emphasis added)<sup>2</sup>

There are 25 pigments disclosed with zinc oxide being one out of twenty-five. None of the 16 examples use zinc oxide. The use of a combination of specific additives comprising zinc oxide, polyakylene glycol and a nitrogen containing compound to reach acid resistant polyoxymethylene compounds are not described in Horio. As the Examiner correctly stated another difference between Horio and the applicants' claimed invention is the amount of zinc oxide disclosed. Horio does not disclose a specific amount and just states an amount usually employed in the art.

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<sup>2</sup> The numbers have been inserted by the applicants and were not in the disclosure.  
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Takayama describes polyacetal / modified olefinic polymer blends with excellent sliding properties comprising zinc oxide as inorganic filler in an amount from 0.1 to 20 parts. Takayama does not teach the preparation of acid resistant polyoxymethylene compounds (see col. 1, lines 7-9 and col. 2, lines 20-35). There is no indication that the above described combination of additives leads to said acid resistant polymers.

Therefore in view of Horio and Takayama, it was not obvious to use an additive combination comprising a polyalkylene glycol, zinc oxide and a nitrogen containing compound to provide polyoxymethylenes with improved acid resistance.

The Examiner must consider the references as a whole, In re Yates, 211 USPQ 1149 (CCPA 1981). The Examiner cannot selectively pick and choose from the disclosed multitude of parameters **without any direction** as to the particular one selection of the reference **without proper motivation**. The mere fact that the prior art may be modified to reflect features of the claimed invention does not make modification, and hence claimed invention, obvious **unless the prior art suggested the desirability of such modification** (In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984); In re Baird, 29 USPQ 2d 1550 (CAFC 1994) and In re Fritch, 23 USPQ 2nd. 1780 (Fed. Cir. 1992)). In re Gorman, 933 F.2d 982, 987, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991) (in a determination under 35 U.S.C. § 103 it is impermissible to simply engage in a hindsight reconstruction of the claimed invention; the references themselves must provide some teaching whereby the applicant's combination would have been obvious); In re Dow Chemical Co., 837 F.2d 469, 473, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988) (under 35 U.S.C. § 103, both the suggestion and the expectation of success must be founded in the prior art, not in the applicant's disclosure). The applicants disagree with the Examiner why one skilled in

the art with the knowledge of the references would selectively modify the references in order to arrive at the applicants' claimed invention. The Examiner's argument is clearly based on hindsight reconstruction.

Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention absent some teaching, suggestion, or incentive supporting this combination, although it may have been obvious to try various combinations of teachings of the prior art references to achieve the applicant's claimed invention, such evidence does not establish prima facie case of obviousness (In re Geiger, 2 USPQ 2d. 1276 (Fed. Cir. 1987)). There would be no reason for one skilled in the art to combine Horio and Takayama.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

A one month extension fee has been paid. Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 05587-00330-US from which the undersigned is authorized to draw.

Respectfully submitted,

By 

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